

Phone Hardening

To tighten security on the phone, you can perform tasks in the Phone Configuration window of Cisco CallManager Administration.

This chapter contains information on the following topics:

- Disabling the Gratuitous ARP Setting, page 4-1
- Disabling Web Access Setting, page 4-2
- Disabling the PC Voice VLAN Access Setting, page 4-2
- Disabling the Setting Access Setting, page 4-3
- Disabling the PC Port Setting, page 4-3
- Performing Phone Hardening Tasks, page 4-4

Disabling the Gratuitous ARP Setting

By default, Cisco IP Phones accept Gratuitous ARP, or GARP, packets. GARPs, which are used by devices, announce the presence of the device on the network. However, attackers can use these packets to spoof a valid network device; for example, an attacker could send out a GARP that claims to be the default router. If you choose to do so, you can disable Gratuitous ARP in the Phone Configuration window of Cisco CallManager Administration.



Disabling GARP does not prevent the phone from identifying its default router.

- Interactions and Restrictions, page 1-4
- Performing Phone Hardening Tasks, page 4-4
- Cisco IP Phone Administration Guide for Cisco CallManager

Disabling Web Access Setting

Disabling the web server functionality for the phone blocks access to the phone internal web pages, which provide statistics and configuration information. Features, such as Cisco Quality Report Tool, do not function properly without access to the phone web pages. Disabling the web server also affects any serviceability application, such as CiscoWorks, that relies on web access.



Phone users cannot access the Cisco User Option Pages if you disable this option.

To determine if the web services are disabled, the phone parses a parameter in the configuration file that indicates whether the services are disabled or enabled. If the web services are disabled, the phone does not open the HTTP port 80 for monitoring purposes and blocks access to the phone internal web pages.

Related Topics

- Interactions and Restrictions, page 1-4
- Performing Phone Hardening Tasks, page 4-4
- Cisco IP Phone Administration Guide for Cisco CallManager

Disabling the PC Voice VLAN Access Setting

By default, Cisco IP phones forward all packets that are received on the switch port (the one that faces the upstream switch) to the PC port. If you choose to disable the PC Voice VLAN Access setting in the Phone Configuration window of Cisco CallManager Administration, packets received from the PC port that use voice VLAN functionality will drop. This functionality allows a device that is attached to the PC port to use 802.1Q (if available) but not have access to the voice VLAN.

- Interactions and Restrictions, page 1-4
- Performing Phone Hardening Tasks, page 4-4
- Cisco IP Phone Administration Guide for Cisco CallManager

Disabling the Setting Access Setting

By default, pressing the Settings button on a Cisco IP Phone provides access to a variety of information, including phone configuration information. Disabling the Setting Access setting in the Phone Configuration window of Cisco CallManager Administration prohibits access to all options that normally display when you press the Settings button on the phone; for example, the Contrast, Ring Type, Network Configuration, Model Information, and Status settings.

The preceding settings do not display on the phone if you disable the setting in Cisco CallManager Administration. If you disable this setting, the phone user cannot save the settings that are associated with the Volume button; for example, the user cannot save the volume.

Disabling this setting automatically saves the current Contrast, Ring Type, Network Configuration, Model Information, Status, and Volume settings that exist on the phone. To change these phone settings, you must enable the Setting Access Setting in Cisco CallManager Administration.

Related Topics

- Interactions and Restrictions, page 1-4
- Performing Phone Hardening Tasks, page 4-4
- Cisco IP Phone Administration Guide for Cisco CallManager

Disabling the PC Port Setting

By default, Cisco CallManager enables the PC port on all Cisco IP Phones that have a PC port. If you choose to do so, you can disable the PC Port setting in the Phone Configuration window of Cisco CallManager Administration. Disabling the PC port proves useful for lobby or conference room phones.

- Interactions and Restrictions, page 1-4
- Performing Phone Hardening Tasks, page 4-4
- Cisco IP Phone Administration Guide for Cisco CallManager

Performing Phone Hardening Tasks



The following procedure disables functionality for the phone.

Perform the following procedure:

Procedure

- **Step 1** In Cisco CallManager Administration, choose **Device > Phone**.
- Step 2 Specify the criteria to find the phone and click **Find** or click **Find** to display a list of all phones.
- **Step 3** To open the Phone Configuration window for the device, click the device name.
- **Step 4** Locate the following product-specific parameters:
 - PC Port
 - Settings Access
 - Gratuitous ARP
 - PC Voice VLAN Access
 - Web Access



Tin

To review information on these settings, click the "i" button help that displays next to the parameters on the Phone Configuration window.

- Step 5 From the drop-down list box for each parameter that you want to disable, choose **Disabled**.
- Step 6 Click Update.

- Interactions and Restrictions, page 1-4
- Disabling the Gratuitous ARP Setting, page 4-1
- Disabling Web Access Setting, page 4-2
- Disabling the PC Voice VLAN Access Setting, page 4-2
- Disabling the Setting Access Setting, page 4-3
- Disabling the PC Port Setting, page 4-3

Performing Phone Hardening Tasks